

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 25, 2003, 11:49:10 ; Search time 18.88 seconds

(Without alignments)
81.470 Million cell updates/sec

Title: US-09-869-540a-2_COPY_4_19

Perfect score: 95

Sequence: 1 MRCMIGRYRRCMOV 16

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 segs, 96134422 residues

283224

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database :

Listing first 45 summaries

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	95	100.0	56	2	S68499 melanin-concentrat
2	95	100.0	165	2	A36237 melanin-concentrat
3	95	100.0	165	2	I52634 melanin-concentrat
4	82	86.3	132	1	MTONIK melanin-concentrat
5	82	86.3	132	1	MTONZK melanin-concentrat
6	82	86.3	132	2	B32910 melanin-concentrat
7	82	86.3	132	2	S34653 melanin-concentrat
8	82	86.3	132	2	S34654 melanin-concentrat
9	82	86.3	132	2	A32910 melanin-concentrat
10	44.5	46.8	186	2	D91252 hypothetical prote
11	43	45.3	3206	1	GNVSPV genome polypeptid
12	42	44.2	250	1	GT0968 probable methyltra
13	42	44.2	577	1	VBBE61 glycoprotein E - s
14	42	44.2	660	2	T27794 hypothetical prote
15	42	44.2	1177	2	A63009 polyketide synthet
16	42	44.2	1489	2	G98274 hypothetical prote
17	41	43.2	315	2	S03416 probable transposa
18	40.5	42.6	426	2	G02277 creatine transport
19	40.5	42.6	635	2	S23431 choline transport
20	40.5	42.6	635	2	A46061 Na(+)-dependent cr
21	40.5	42.6	635	2	JC2386 creatine transport
22	40.5	42.6	635	2	G02095 creatine transport
23	40	42.1	61	2	G34429 Argase inhibitor 3
24	40	42.1	143	2	I47202 Ig heavy chain var
25	40	42.1	367	2	F69816 reticuline oxidase
26	40	42.1	368	2	AB2215 hypothetical prote
27	40	42.1	567	2	F87594 conserved hypothet
28	40	42.1	1131	2	T19442 hypothetical prote
29	40	42.1	1711	1	A55148 protein-tyrosine-p

30	39	41.1	111	2	S25343	ORIS protein - yea
31	39	41.1	170	2	A60630	4-hydroxyphenylace
32	39	41.1	173	1	CYCAG2	gamma-cristallin m
33	39	41.1	229	2	G86924	hypothetical prote
34	39	41.1	404	2	H87635	Rieske 2Fe-2S fam1
35	39	41.1	430	2	T47014	hypothetical prote
36	39	41.1	430	2	AC0237	probable membrane
37	39	41.1	478	2	T27714	hypothetical prote
38	39	41.1	519	2	D82522	type I restriction
39	39	41.1	535	2	T17212	hypothetical prote
40	39	41.1	1286	2	T33476	hypothetical prote
41	39	41.1	1583	2	F86366	protein F26F24.8 l
42	39	41.1	1657	2	T15838	hypothetical prote
43	39	41.1	4302	2	A38971	polycystic kidney
44	38.5	40.5	189	1	IVHU16	interferon alpha-I
45	38.5	40.5	189	2	I37584	IFN-alpha-N-proteol

ALIGNMENTS

RESULT 1

S68499

melanin-concentrating hormone - mouse (fragment)

C.Species: Mus musculus (house mouse)

C.Date: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 07-May-1999

C.Accession: S68499

R.Qu: D., Luddvig, D.S.: Gammeltoft, S.: Piper, M.: Pelleymounter, M.A.: Cullen, M.J.:

Nature 380, 243-246, 1996

A>Title: A role for melanin-concentrating hormone in the central regulation of feedin

A.Reference number: S68499; PMID:96207751; PMID:8637571

A.Accession: S68499

A.Molecule type: mRNA

A.Residues: 1-56 <OUD>

A.Experimental source: tissue hypothalamus

C.Keywords: hormone; hypothalamus; neuropeptide

F.1-19/Product: neuropeptide N-GE (fragment) #status predicted <NGE>

F.38-56/Product: melanin-concentrating hormone #status predicted <MAT>

F.38-56/Product: melanin-concentrating hormone #status predicted <MAT>

Query Match 100.0%; Score 95; DB 2; Length 56;

Best Local Similarity 100.0%; Pred. No. 1e-08;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MRCMIGRYRRCMOV 16

DB 41 MRCMIGRYRRCMOV 56

RESULT 2

A36237

melanin-concentrating hormone precursor - rat

C.Species: Rattus norvegicus (Norway rat)

C.Date: 12-Apr-1991 #sequence_revision 12-Apr-1991 #text_change 16-Jul-1999

C.Accession: A36237; A37407; A37406

R.Thompson, R.C.; Watson, S.J.

DNA Cell Biol. 9, 637-645, 1990

A>Title: Nucleotide sequence and tissue-specific expression of the rat melanin concn

A.Reference number: A36237; PMID:91083836; PMID:2261081

A.Accession: A36237

A.Status: preliminary; not compared with conceptual translation

A.Molecule type: DNA

A.Residues: 1-165 <RHO>

A.Cross-references: GB:M62641; NID:9205329; PIDN:AAA1581.1; PID:9205330

R.Nahon, J.L.; Presse, F.; Bittencourt, J.C.; Sawchenko, P.E.; Vale, W.

Endocrinology 125, 2056-2065, 1989

A>Title: The rat melanin-concentrating hormone messenger ribonucleic acid encodes mul

A.Reference number: A37407; PMID:90005146; PMID:2477226

A.Accession: A37407

A.Status: preliminary

A.Molecule type: mRNA

A.Residues: 1-165 <NAH>

A:Accession: J50049
A:Molecule type: mRNA
A:Residues: 1107; P: 109-132 <CON>
A:Cross-references: GB:M23574; NID:g213458; PIDN:AAA9421.1; PID:g213459
R:Kawanishi, H.; Kawazoe, I.; Tsubokawa, M.; Kishida, M.; Baker, B.I.
Nature 305, 321-323, 1983
A:Title: Characterization of melanin-concentrating hormone in chum salmon pituitaries.
A:Reference number: A93316; MUID:84014069; PMID:6621686
A:Accession: B01472
A:Molecule type: protein
A:Residues: 116-132 <KAN>
C:Comment: For melanin-concentrating hormone 1, see PIR:MTCNLK.
C:Comment: This hormone, isolated from the pituitary gland, has an activity antagonistic
C:Genetics:
A:Gene: MCH2
C:Superfamily: melanin-concentrating hormone
C:Keywords: glycoprotein; hormone; hypothalamus; pituitary
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-115/Domain: propeptide #status predicted <PRO>
F:116-132/Product: melanin-concentrating hormone #status experimental <MAT>
F:107/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:120-129/Disulfide bonds: #status experimental

Query Match 86.3%; Score 82; DB 1; Length 132;
Best Local Similarity 80.0%; Pred. No. 3e-06;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2 LRCMLGRVRRPCMOV 16
DB 118 MRCWGRVRRPCMEV 132

RESULT 6
B32910
melanin-concentrating hormone 2 precursor - chinook salmon
C:Species: Oncorhynchus tshawytscha (chinook salmon)
C>Date: 08-Dec-1989 #sequence_revision 08-Dec-1989 #text_change 16-Jul-1999
C:Accession: B32910
R:Manth, C.D.; Qiu, H.; Akil, H.; Watson, S.J.; Dixon, J.E.
Proc. Natl. Acad. Sci. U.S.A. 86, 4292-4296, 1989
A:Title: Two precursors of melanin-concentrating hormone: DNA sequence analysis and
A:Reference number: A32910; MUID:89264605; PMID:2471200
A:Accession: B32910
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-132 <MIN>
A:Cross-references: GB:M25755; GB:J04562; NID:g213462; PIDN:AAA9423.1; PID:g213463
C:Superfamily: melanin-concentrating hormone

Query Match 86.3%; Score 82; DB 2; Length 132;
Best Local Similarity 80.0%; Pred. No. 3e-06;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2 LRCMLGRVRRPCMOV 16
DB 118 MRCWGRVRRPCMEV 132

RESULT 7
S34653
melanin-concentrating hormone 1 - rainbow trout
C:Species: Oncorhynchus mykiss (rainbow trout)
C>Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 16-Jul-1999
C:Accession: S34653
R:Hall, L.
Submitted to the EMBL Data Library, July 1993
A:Reference number: S34653
A:Accession: S34653
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-132 <HAL>
A:Cross-references: EMBL:X73837; NID:g935051; PIDN:CAA52059.1; PID:g935052
C:Superfamily: melanin-concentrating hormone

Query Match 86.3%; Score 82; DB 2; Length 132;
Best Local Similarity 80.0%; Pred. No. 3e-06;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2 LRCMLGRVRRPCMOV 16
DB 118 MRCWGRVRRPCMEV 132

RESULT 8
S34654
melanin-concentrating hormone 2 - rainbow trout
C:Species: Oncorhynchus mykiss (rainbow trout)
C>Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 16-Jul-1999
C:Accession: S34654
R:Hall, L.
Submitted to the EMBL Data Library, July 1993
A:Reference number: S34654
A:Accession: S34654
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-132 <HAL>
A:Cross-references: EMBL:X73838; NID:g935053; PIDN:CAA52060.1; PID:g935054
C:Superfamily: melanin-concentrating hormone

Query Match 86.3%; Score 82; DB 2; Length 132;
Best Local Similarity 80.0%; Pred. No. 3e-06;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2 LRCMLGRVRRPCMOV 16
DB 118 MRCWGRVRRPCMEV 132

RESULT 9
A32910
melanin-concentrating hormone 1 precursor - chinook salmon
C:Species: Oncorhynchus tshawytscha (chinook salmon)
C>Date: 08-Dec-1989 #sequence_revision 08-Dec-1989 #text_change 16-Jul-1999
C:Accession: A32910
R:Manth, C.D.; Qiu, H.; Akil, H.; Watson, S.J.; Dixon, J.E.
Proc. Natl. Acad. Sci. U.S.A. 86, 4292-4296, 1989
A:Title: Two precursors of melanin-concentrating hormone: DNA sequence analysis and
A:Reference number: A32910; MUID:89264605; PMID:2471200
A:Accession: A32910
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-132 <MIN>
A:Cross-references: GB:M25754; GB:J04561; NID:g213460; PIDN:AAA9422.1; PID:g213461
C:Superfamily: melanin-concentrating hormone

Query Match 86.3%; Score 82; DB 2; Length 132;
Best Local Similarity 80.0%; Pred. No. 3e-06;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2 LRCMLGRVRRPCMOV 16
DB 118 MRCWGRVRRPCMEV 132

RESULT 10
D91252
hypothetical protein EC4988 [imported] - Escherichia coli (strain O157:H7, substrati
C:Species: Escherichia coli
C>Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 18-Jul-2001
C:Accession: D91252
R:Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Hon, C.
gawara, N.; Yasunaga, T.; Kohara, S.; Shiba, T.; Hattori, M.; Shingawa, H.
DNA Res. 8, 11-22, 2001
A:Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and
A:Reference number: A99629; MUID:21156231; PMID:11258796
A:Accession: D91252

db 504 MRCVERIYNGLMNI 518

RESULT 15

AG3009

polyketide synthetase Atu3681 [imported] - Agrobacterium tumefaciens (strain C58, Dupont
C:Species: Agrobacterium tumefaciens

C:Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 11-Jan-2002

C:Accession: AG3009

R:Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, I.
; Karp, P.; Romero, P.; Zhang, S.
; Karp, P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001

A:Authors: Yoo, H.; Teo, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
ster, E.W.

A:Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.

A:Reference number: AB2577; PMID:11743193

A:Accession: AG3009

A:Status: Preliminary

A:Molecule type: DNA

A:Residues: 1-1477 <RUR>

A:Cross-references: GB:AE008689; PIDN:AAL4453.1; PID:g17742100; GSPDB:GN00187

A:Experimental source: strain C58 (Dupont)

C:Genetics:

A:Gene: Atu3681

A:Map position: linear chromosome

Query Match

44.28; Score 42; DB 2; Length 1477;

Best Local Similarity 75.0%; Pred. No. 98;

Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 8 RYRRCWQ 15

1:111111
Db 894 RYRRCWQ 901

Search completed: June 25, 2003, 11:55:45
Job time : 19.86 secs